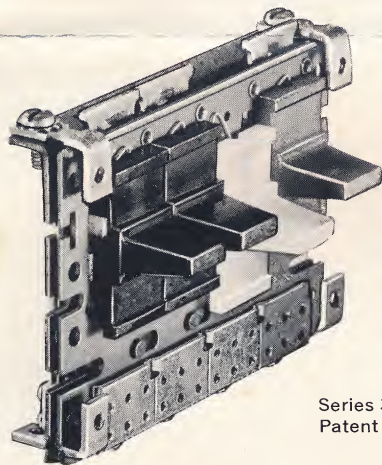


NEW!

"MULTI-SLIDE" SWITCH

*provides new flexibility
in control panel design*



Series 39000
Patent Applied For

the **first** multiple station
slide switch with interlock,
non-lock and all-lock
functions

Switchcraft's revolutionary new Series 39000 "Multi-Slide" Switch was developed with human-engineer factors as a guide. Gives design engineers an entirely new switching method with which to solve "man-machine system" problems. It is now possible, with the "Multi-Slide" Switch to eliminate much of the operating confusion inherent in the constant manipulation of pushbutton matrixes.

Operator reaction can be increased while minimizing errors in complex control consoles through the optimum use of Switchcraft "Multi-Slide" Switches, lever switches and multiple station push-button switches.

The "Multi-Slide" Switch gives full interlock, non-lock and all-lock functions with a special slide-to-release cancelling feature; all on one frame, from 1 to 18 stations in a row, and up to 3 PDT circuitry per station as standard . . . all in a compact assembly requiring a maximum of only 3/4 inch depth behind panel.

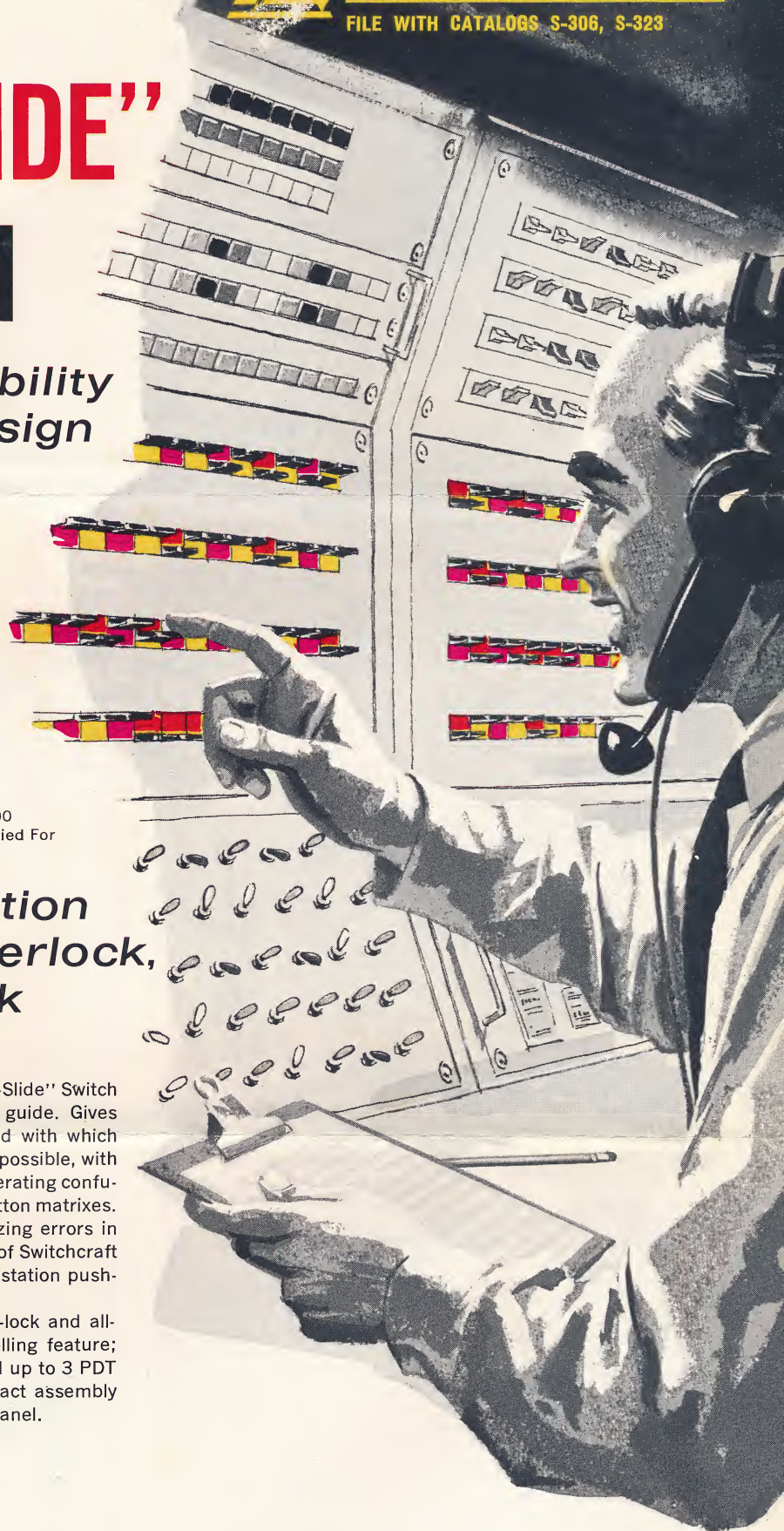
for details contact:



SWITCHCRAFT

NEW PRODUCT BULLETIN NO. 158

FILE WITH CATALOGS S-306, S-323





"MULTI-SLIDE" SWITCH

SERIES 39000

UNIQUE NEW DESIGN

The "Multi-Slide" Switch is a compact, versatile multiple station slide switch that offers a fresh approach to the design of control panels. Engineers now have a third choice in switch operation by designing slide switching visibility and variety into consoles without sacrificing switching versatility or function. Its narrow frame design permits mounting in even the most compact electronic equipment, maximum depth behind panel is only $\frac{3}{4}$ ".

Typical uses of "Multi-Slide" Switches include telephone equipment, computers, transmitters and receivers, intercoms, machine and process control, ground support system control panels, test measurement and instrumentation and other control panel applications that require fast operator reaction without errors.

VERSATILE FUNCTIONS

Positive interlock with fail-safe lock-out, or non-lock, or all-lock with slide-to-release—or any combination of the above functions on a single frame. One to 18 stations in a single row.

STANDARD FUNCTIONS:

INTERLOCK—actuating a slidebutton automatically restores to normal the slidebutton previously actuated. Lock-out feature, which prevents the operation of more than one slidebutton at a time, is standard on all interlock frames.

NON-LOCK—each slidebutton has momentary action. No interaction between slidebuttons. Lock-out available on special order only.

ALL-LOCK—all slidebuttons, except release, lock when depressed (accumulative lock). All slidebuttons restored to normal by actuating release slidebutton which has momentary action.

SLIDE-TO-RELEASE CANCELLING FEATURE—permits immediate correction of a switching error without cancelling other actuated switches. The operator simply restores the slidebutton activated in error to its neutral position. This feature standard in interlock and all-lock frames.

SPECIAL FUNCTIONS—a variety of special functions and accessories is available on special order. such as: intermixed switching functions and snap-switch modules. See Pages 3 and 4 for details.

SWITCHING

Series 39000 uses the new "Tini-Stack", a miniature stack switch utilizing special nickel silver springs. Up to three "Tini-Stacks" can be mounted at each station, providing for a minimum of 1-A (SPST) to a maximum of 3-C (3PDT) per button. Additional switching may be provided on special order. Order these stack switches from page 4. A snap switch module that can be mounted at each station is now available for applications requiring ratings of up to 15 amps, 125/250 volts, A.C. See page 4 for specifications.

SLIDEBUTTONS

Anti-error spatula-shaped slidebuttons provide an interesting, fresh panel appearance. Human factored shape of the slidebuttons eliminate the problems created by monotonous masses of push-buttons and levers on control panels—operators tell at a glance if slidebuttons are in an actuated position.

A black slidebutton is furnished for each station and an extra red slidebutton for use when switch requires a release. White slidebuttons are also available; other colors available on special order.

CHROMATIC LEGEND TABS



Status indication or color coding of individual switches is provided by pressure sensitive colored legend tabs that are easily inserted to the recessed portions of each slidebutton. The use of separate colored legend tabs for each slidebutton permits a wide range of color flexibility. The appearance of the control panel can be changed by merely varying the legend tabs.

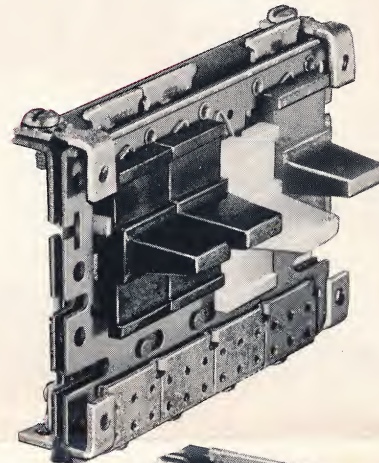
Tabs can be hot stamped to provide identification of individual slidebuttons. The tab is inserted in the recessed portion of the slidebutton and the legend is therefore protected from wear.

Standard Colors: Red, Black, Green, Blue, White, Yellow. Other colors available on special order. Chromatic Legend Tabs are not furnished with switches. To order specify: Part Nos. 408-01, Red; 408-02, Black; 408-03, Green; 408-04, Blue; 408-05, White; 408-08, Yellow.

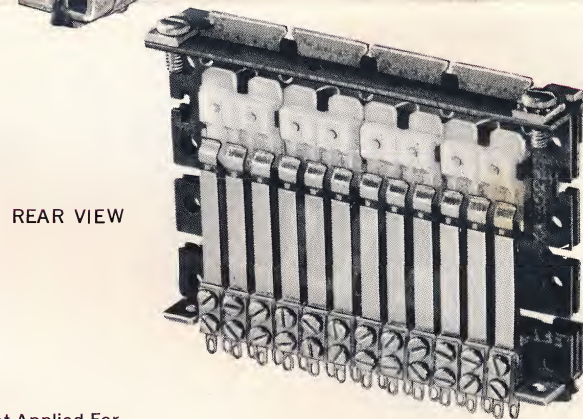
U.S.A. List Price.....\$1.00 per package of 50

A mixed color kit of Chromatic Legend Tabs is also available. Ten tabs of each of the 6 standard colors are packaged in a plastic bag to provide various color combinations and copy. To order Kit, specify:

Part No. K-120.....U.S.A. List Price \$1.20



FRONT VIEW



REAR VIEW

*Patent Applied For.

STANDARD ASSEMBLIES

"Multi-Slide" Switch frames are available, with interlock or non-lock functions in a single row assembly of 1 to 18 stations direct from stock. All-lock function switch frames available up to 12 stations. The following part numbers cover the basic frame only which includes slidebuttons and stack switch mounting brackets for each station. To complete assembly, order correct stack switch assemblies or Snap-Switch Modules from page 4 as required. For special functions see Page 3. *To provide lock-out function on non-lock frames, suffix part number with the letter "K". Add 10% to list price to cover added costs. See page 3 for description.

FRAME PART NO.

INTERLOCK FUNCTION (With Lock-Out)	NON-LOCK FUNCTION *(Lock-Out on Special Order)	ALL-LOCK FUNCTION (Lock-Out Not Available)	NO. OF STATIONS	U.S.A. LIST PRICE
—	39012	—	1	\$8.25
39021	39022	39023	2	9.50
39031	39032	39033	3	11.00
39041	39042	39043	4	14.50
39051	39052	39053	5	15.75
39061	39062	39063	6	18.00
39071	39072	39073	7	20.25
39081	39082	39083	8	22.50
39091	39092	39093	9	24.75
39101	39102	39103	10	27.00
39111	39112	39113	11	29.25
39121	39122	39123	12	31.50
39131	39132	—	13	33.75
39141	39142	—	14	36.00
39151	39152	—	15	38.25
39161	39162	—	16	40.50
39171	39172	—	17	42.75
39181	39182	—	18	45.00

Standard Distributor Package 1



CONSTRUCTION

The "Multi-Slide" Switch is manufactured with high quality materials which are finished with a new dry film lubricant that resists corrosion and eliminates dirt and grease pick-up. The frames are stamped from precision dies, internally keyed for correct alignment to assure smooth switching action throughout entire life of switch. Switches use molded nylon lifters for easier action and longer switch life.

MOUNTING

The entire "Multi-Slide" Switch frame, from 1 to 18 stations, mounts with only four No. 6-32 machine screws (not furnished with switch). It requires a maximum of only $\frac{3}{4}$ " depth behind panel. The switch mounts directly to the underside of the panel and may be mounted horizontally or vertically. Maximum recommended panel thickness is $\frac{1}{8}$ inch wide.

A slot in the mounting panel must be large enough for adequate clearance of slidebuttons and legend tabs, length of slot depends upon the number of stations on the frame. See drawing for mounting dimensions.

MATERIAL SPECIFICATIONS

FRAME—Steel-dry film lubricant over black oxide.

PLUNGERS, STACK SWITCH MOUNTING BRACKETS AND SCREWS—Steel with iridescent iridite over cadmium plating per QQ-P-416a.

STACK SWITCHES—Stack switch springs are made of special alloy of spring tempered nickel silver. Solder lugs are hot tin dipped.

INSULATION—Stack Switches have paper base epoxy resin spacers with plastic tubing through the stack.

SLIDEBUTTONS & LIFTERS—Molded nylon.

SPECIAL FUNCTIONS AVAILABLE ON "MULTI-SLIDE" SWITCHES—Series 39000

Standard "Multi-Slide" Switches have been so designed that "special" functions may be added at nominal cost. Listed below are several of these "special" functions which exemplifies the flexibility of these switches.

INTERLOCK & NON-LOCK FUNCTION

Certain stations will interlock while others will have non-lock (without affecting the interlocked stations) on the same frame.

ALL-LOCK & NON-LOCK FUNCTION

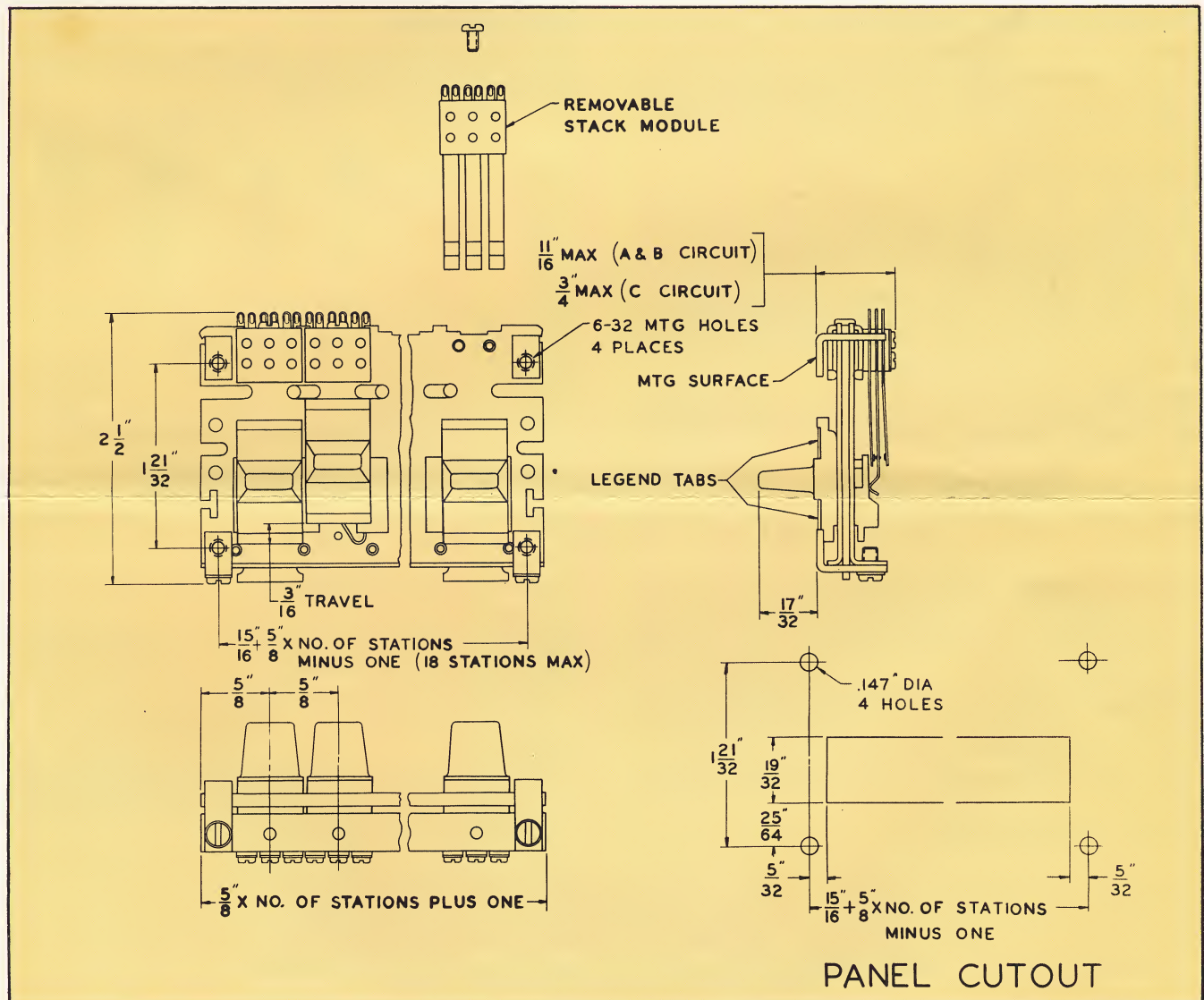
Certain stations will all-lock (accumulative lock) while others will have non-lock function (momentary). Release button restores to normal the locked stations.

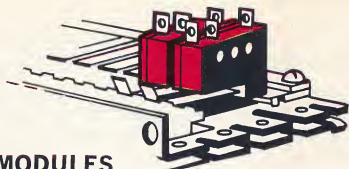
INTERLOCK & ALL-LOCK FUNCTION

Certain stations will interlock and other stations will all-lock without affecting the interlock stations on a common frame.

LOCK-OUT FUNCTION

This function is standard on all interlock frames, but must be ordered as a special when required on non-lock frames. The lock-out, when included on the non-lock frame prevents the operation of more than one station at a time. For example: it is possible to depress more than one station simultaneously on a frame with the non-lock function unless the lock-out function has been included. To order add suffix "K" to frame part number. Add 10% to frame list price to cover cost. **NOTE:** Lock-out function is not available for all-lock frames.





"PIGGY-BACK" SNAP-SWITCH MODULES

Snap-Switch modules consist of a snap-action switch, an actuator and a bracket which mounts "piggy-back" fashion on the switch mounting brackets provided in Series 39000. The modules increase the switching load capacity of the "Multi-Slide" Switch from 3 amperes to 15 amperes. One snap-action switch module can be mounted at each station.

MINIATURE SNAP-SWITCH MODULES

A small snap-action switch providing single pole, double-throw circuitry. Rated at 15 amperes, 1/2 HP, 125/250 V A.C., U.L. and CSA approved. One snap-action switch is mounted to each bracket. Solder terminals.

Part No. 83SA is designed to be used where the switching circuit between stations must be so controlled that the contacts of a released station will return to normal before contacts of a newly operated station are actuated.

Part No. 803SA for use on other functions where contacts of a newly operated station must be actuated before contacts of a released station return to normal.

SUBMINIATURE SNAP-SWITCH MODULES

A very small snap-action switch, available in single pole, double-throw circuitry; rated at 10 amperes 1/4 HP, 125 V A.C., UL and CSA approved. One or two subminiature snap-action switches are mounted to each bracket. Solder terminals.

Part No. 83SC single snap-switch module. Designed to be used on switching functions as described under Part No. 83SA. Part No. 83SD, same as 83SC, except double snap-switch module.

Part No. 803SC, single snap-switch module. For use on functions as described under Part No. 803SA. Part No. 803SD, same as 803SC, except a double snap-switch module.

PART NO.	SPDT CIRCUITS	U.S.A. LIST PRICE	PART NO.	SPDT CIRCUITS	U.S.A. LIST PRICE
83SA	1	\$2.50	83SD	2	\$8.00
803SA	1	2.50	803SC	1	4.50
83SC	1	4.50	803SD	2	8.00

Mounting instructions and hardware furnished with each module.
Standard Distributor Package 1

"SWITCH STACKS"

"MULTI-SLIDE" SWITCHES SERIES 39000

MINIATURE "TINI-STACKS"

Highly reliable switch stacks made of special spring tempered nickel silver with cross-bar welded palladium contacts. Gold and silver contacts are available on special order.

SWITCH STACK VERSATILITY

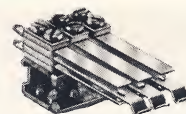
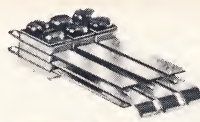
Two switch stack Series, 80P and 800P, in four circuits are offered. All stacks can be easily mounted on the removable switch stack bracket furnished with all standard "Multi-Slide" Switch frames. Variations in switch circuitry available on special order.

REMOVABLE SWITCH STACK BRACKET

Switch stacks, when securely fastened to the bracket, can be easily and quickly removed, as a module, from the switch frame. Other wiring and stacks are not disturbed. Each bracket accommodates up to 3 switch stacks. An entire module can be changed in seconds by removing a single screw.

SERIES 80P—Cross-bar welded palladium contacts, rated at 3 amperes, 300 watts max., A.C., non-inductive load. Use where the switching circuit between stations must be so controlled that the contacts of a released station will return to normal before contacts of a newly operated station are actuated.

SERIES 800P—Identical to Series 80P, except to be used on other functions where contacts of a newly operated station must be actuated before contacts of a released station return to normal.



"SWITCH STACKS"

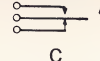
Listed below are standard switch stack assemblies for mounting on the removable brackets. Two mounting screws and one pressure plate are furnished with each stack.

SERIES 80P			SERIES 800P		
CIRCUITS	PART NO.	U.S.A. LIST PRICE	PART NO.	U.S.A. LIST PRICE	STACK HEIGHT MAX.
1A	81P	\$.60	801P	\$.60	1 1/16"
1B	82P	.60	802P	.60	1 1/16"
1C	83P	.80	803P	.80	3/4"
1D	83PD	.90	803PD	.90	3/4"

Switch stack heights, see page 3.

Standard Distributor Package 12

BASIC CONTACT FORMS



Other contact forms available on special order.

CHECK LIST AND ORDERING INFORMATION FOR "MULTI-SLIDE" SWITCHES

Switchcraft has a unique network of local factory-trained distributors to give you expert assistance in the selection of various components for your own assembly of "Multi-Slide" Switches. These distributors are ready to supply pre-assembled switches to meet your exact specifications at factory prices.

For your large production requirements, we suggest you contact the Switchcraft representative in your area for assistance.

Specification sheets are available for your ordering and specifying convenience. Request form No. GL-574-2.

Your initial inquiry or order should include the following information:

1. Number of stations required.

2. Switching needed on each station.

3. Function.

4. In order to determine the suitability of your choice, we suggest you furnish us details regarding:

- Current and voltage in each circuit.
- Life requirements.

5. Slidebuttons.

- For slidebuttons requiring identification, we recommend for maximum contrast and greatest legibility, use black lettering on the white and yellow Chromatic Legend Tabs and white lettering on the darker colors.



SWITCHCRAFT
INC.

General Offices and Plant—5555 North Elston Avenue, Chicago, Illinois 60630
Area Code 312—Tel: 774-1515—TWX: 312 265-1314

We reserve the right to change the prices, specifications and/or part numbers contained herein when circumstances make it necessary.

Form No. GL-705 765

Litho. in U.S.A.

IMPORTANT - THIS TECHNICAL INFORMATION: 158, Tech-Topics
10/65

WAS REQUESTED BY:

- MR T H NELSON SYS ENG
INTERLOCKING SYS CO
BOX 1546
POUGHKEEPSIE NY
-

a

Here is the information you requested.

If you need additional data, we have attached a self-addressed postage-paid post card listing all Switchcraft literature. Check off the catalogs you wish and return the card. The literature will be forwarded to you by return mail.

All Switchcraft products are sold nationally through leading electronic parts distributors.

Should you desire technical application assistance, kindly contact either our office directly or our Sales Representative listed below.

OUR REPRESENTATIVE IN YOUR AREA IS:

Thank you

DEPT. OF STATE (INDUSTRIAL ONLY)
FRANK W TAYLOR INC
4455E GENESEE ST
PO BOX 86
NEW YORK 13214

SWITCHCRAFT
INC.

5555 N. ELSTON AVE. • CHICAGO 30, ILL.
774-1515 • TWX 312 265-1314

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